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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,580	01/21/2004	Michael I. Chia	DP-309337	2605

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EXAMINER	
GIBSON, ERIC M	

ART UNIT	PAPER NUMBER
3661	

DATE MAILED: 11/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/761,580	CHIA, MICHAEL I.	
	Examiner	Art Unit	
	Eric M. Gibson	3661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 January 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 January 2004* is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 7-13, and 15-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Gilling et al. (US005749426A).

Per claim 1, Gilling teaches a method for providing close range detection for a motor vehicle including determining an initial range and range rate (column 3, lines 28-32), determining whether the initial range to the target is less than a current range to the target when the range rate to the target is not above the predetermined rate and providing an adjusted range when the initial range to the target is less than the current range to the target and the range rate is below the predetermined rate (column 6, lines 31-55), wherein the adjusted range is utilized to control operation of the motor vehicle.

Per claims 2-4, Gilling teaches adding a predetermined offset to the adjusted range when the range rate is above a predetermined rate (column 5, lines 11-51).

Per claim 5, Gilling teaches that the purpose of the adjusted range is to maintain a separation distance when the vehicle range rate becomes 0.0 m/s, i.e. when the vehicle stops.

Per claims 7 and 8, Gilling teaches that the operation of the vehicle is controlled by the throttle and brake systems (column 6, lines 8-12).

Per claim 9, Gilling teaches a system for providing close range detection for a motor vehicle including a range senor (1, figure 1) and a subsystem for determining an initial range and range rate (column 3, lines 28-32), determining whether the initial range to the target is less than a current range to the target when the range rate to the target is not above the predetermined rate and providing an adjusted range when the initial range to the target is less than the current range to the target and the range rate is below the predetermined rate (column 6, lines 31-55), wherein the adjusted range is utilized to control operation of the motor vehicle.

Per claims 10-12, Gilling teaches adding a predetermined offset to the adjusted range when the range rate is above a predetermined rate (column 5, lines 11-51).

Per claim 13, Gilling teaches that the purpose of the adjusted range is to maintain a separation distance when the vehicle range rate becomes 0.0 m/s, i.e. when the vehicle stops, which is "about" .5 m/s.

Per claims 15 and 16, Gilling teaches that the operation of the vehicle is controlled by the throttle and brake systems (column 6, lines 8-12).

Per claim 17, Gilling teaches a system for providing close range detection for a motor vehicle including a range senor (1, figure 1) and a subsystem for determining an initial range and range rate (column 3, lines 28-32), determining whether the initial range to the target is less than a current range to the target when the range rate to the target is not above the predetermined rate and providing an adjusted range when the initial range to the target is less than the current range to the target and the range rate is below the predetermined rate (column 6, lines 31-55), wherein the adjusted range is

utilized to control operation of the motor vehicle, and adding a predetermined offset to the adjusted range (column 5, lines 11-51), and also including a throttle subsystem (16, figure 1).

Per claim 18, Gilling teaches adding a predetermined offset to the adjusted range when the range rate is above a predetermined rate (column 5, lines 11-51).

Per claim 19, Gilling teaches that the purpose of the adjusted range is to maintain a separation distance when the vehicle range rate becomes 0.0 m/s, i.e. when the vehicle stops, which is "about" .5 m/s.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 6, 14, 20, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilling in view of Labuhn et al. (US006622810B2).

Per claims 6, 14, and 20, Gilling teaches the invention as explained in the rejection of claims 1, 9, and 17. Gilling does not teach an alarm when the vehicle approaches too close to the preceding vehicle. Such a capability would have been well known to one of ordinary skill in the art at the time of the invention. An alarm serves the purpose of alerting the driver that the vehicle has become dangerously close to the vehicle in front. Even in systems where the vehicle initiates braking, it is still beneficial

to warn and alert the driver in order to ensure safety and reduce the chances of a collision. Labuhn is exemplary of the fact that this alarm capability was well known to one of ordinary skill in the art at the time of the invention (see column 5, lines 28-39). It would have been obvious to one of ordinary skill in the art, at the time of invention, to provide an alarm to warn the driver that the vehicle is too close to the preceding vehicle, in order to alert the driver and decrease the risk of a collision.

Per claim 21, Gilling teaches a brake subsystem (17, figure 1).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Manaka (US 20030154016A1, US006810319B2) teaches a vehicle-to-vehicle distance controller and vehicle. Tellis et al. (US006708099B2) teaches a stop-and-go adaptive cruise control system. Inoue et al. (US006430494B1) teaches a preceding vehicle following control apparatus and method for automotive vehicle. Labuhn et al. (US006009368A) teaches active vehicle deceleration in an adaptive cruise control system. Nakamura et al. (US006044321A) teaches an intelligent cruise control system for a moving body. Gilling et al. (US005495251A) teaches a method and apparatus for cruise control. Labuhn et al. (US005454442A) teaches adaptive cruise control. Etoh (US004621705A) teaches a system for controlling vehicle speed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric M. Gibson whose telephone number is (571) 272-6960. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EMG